



WESTERN METALS  
RECYCLING L.L.C.

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UTAH DIVISION OF  
SOLID & HAZARDOUS WASTE



08.00740

February 20, 2008

State of Utah DEQ  
Division of Solid and Hazardous Waste  
Dennis Downs  
288 North 1460 West  
P.O. Box 144880  
Salt Lake City, UT 84114-4880

Re: Western Metals Recycling Class IIIb Landfill Permit Renewal Application Review

Dear Mr. Downs:

Western Metals Recycling LLC (WMR) received your additional comments on the Class IIIb Landfill Permit Renewal Application (dated December 31, 2007) that was submitted for the Plymouth Landfill. The deficiencies you identified in our permit application were addressed as follows:

1) Closure and Post-Closure Care

As requested, a Closure and Post-Closure Care plan was prepared and is included as Addendum 5 in the revised Landfill Operations Plan (attached).

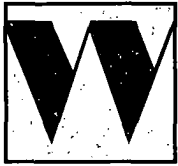
2) Storm Water Control

A detailed description of storm water management was added to the Plymouth Landfill Operations Plan, Section 3.1.8 (Operations of Storm Water and Gas Controls). Two additional figures were also produced to supplement Section 3.1.8. The figures include a conceptual closure site drawing (Figure 6) and a conceptual site profile (Figure 5).

3) Financial Assurance

A copy of the revised letter of credit in the amount of \$537,904 (dated February 1, 2008) is attached. The original copy of the letter of credit was mailed separately to State of Utah DEQ. We are currently in the process of working with Blake Robertson to establish a standby trust.

Should you have any further questions regarding our permit renewal application, please contact Eric Logsdon at (513) 621-8770, Ext. 6035.



WESTERN METALS  
RECYCLING L.L.C.



Very truly yours,

Jeff Davis  
President, Western Metals Recycling, LLC

Enclosure: Revised Operations Plan  
Copy of revised letter of credit

# Utah Class III Landfill Permit Application Form

<b>Part I. General Information</b>		<b>APPLICANT: PLEASE COMPLETE ALL SECTIONS.</b>	
<b>I. Landfill Type</b>	<input type="checkbox"/> Class IIIa <input checked="" type="checkbox"/> Class IIIb	<b>II. Application Type</b>	<input type="checkbox"/> New Application <input checked="" type="checkbox"/> Renewal Application
		<input type="checkbox"/> Modification <input type="checkbox"/> Change of Ownership	
For Renewal Applications, Changes of Ownership, and Modifications Enter Current Permit Number <u>9616 R1</u>			
<b>III. Facility Name and Location</b>			
Legal Name of Facility <u>Western Metals Recycling, LLC</u>			
Site Address (street or directions to site) <u>7400 West Cemetery Road</u>			County <u>Box Elder</u>
City <u>Plymouth</u>	State <u>UT</u>	Zip Code <u>84330</u>	Telephone <u>(435) 458-3851</u>
Township <u>13</u>	Range <u>3</u>	Section(s) <u>4</u>	Quarter/Quarter Section <u>Quarter Section</u>
Main Gate Latitude <u>41</u> degrees <u>53</u> minutes <u>36</u> seconds		Longitude <u>111</u> degrees <u>12</u> minutes <u>05</u> seconds	
<b>IV. Facility Owner(s) Information</b>			
Legal Name of Facility Owner <u>Western Metals Recycling, LLC</u>			
Address (mailing) <u>150 West Civic Center Drive</u>			
City <u>Sandy</u>	State <u>UT</u>	Zip Code <u>84070</u>	Telephone <u>(801) 972-0304</u>
<b>V. Facility Operator(s) Information</b>			
Legal Name of Facility Operator <u>Western Metals Recycling, LLC</u>			
Address (mailing) <u>7400 West Cemetery Road</u>			
City <u>Plymouth</u>	State <u>UT</u>	Zip Code <u>84330</u>	Telephone <u>(435) 458-3851</u>
<b>VI. Property Owner(s) Information</b>			
Legal Name of Property Owner <u>Western Metals Recycling, LLC</u>			
Address (mailing) <u>150 West Civic Center Drive</u>			
City <u>Sandy</u>	State <u>UT</u>	Zip Code <u>84070</u>	Telephone <u>(801) 972-0304</u>
<b>VII. Contact Information</b>			
Owner Contact <u>Eric Logsdon</u>		Title <u>Environmental Engineer</u>	
Address (mailing) <u>The David J. Joseph Company, 300 Pike Street</u>			
City <u>Cincinnati</u>	State <u>OH</u>	Zip Code <u>45202</u>	Telephone <u>(513) 419-6035</u>
Email Address <u>eml@djj.com</u>		Alternative Telephone (cell or other) <u>(513) 300-4675</u>	
Operator Contact <u>Jardee Steed</u>		Title <u>Plant Manager</u>	
Address (mailing) <u>7400 West Cemetery Road</u>			
City <u>Plymouth</u>	State <u>UT</u>	Zip Code <u>84330</u>	Telephone <u>(435) 458-3851</u>
Email Address <u>jcs@WMRecycling.com</u>		Alternative Telephone (cell or other)	
Property Owner Contact <u>Jeff Davis</u>		Title <u>President</u>	
Address (mailing) <u>150 West Civic Center Drive</u>			
City <u>Sandy</u>	State <u>UT</u>	Zip Code <u>84070</u>	Telephone <u>(801) 972-0304</u>
Email Address <u>jhd@wmrecycling.com</u>		Alternative Telephone (cell or other)	

# Utah Class III Landfill Permit Application Form

## Part I General Information (Continued)

### VIII. Waste Types (check all that apply)

☐ All types of non-hazardous industrial waste generated by the facility OR the following specific waste types

Waste Type	Combined Disposal Unit	Monofill Unit
<input type="checkbox"/> Construction & Demolition	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Incinerator Ash	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Animals	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Asbestos	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other	<input type="checkbox"/>	<input type="checkbox"/>

Note: All waste types must be generated by the industry which owns the facility

### IX. Facility Area

Facility Area	6.5	acres
Disposal Area	22.5	acres
Design Capacity	30	
Years		
Cubic Yards	900,000	
Tons	900,000	

### X. Fee and Application Documents

Indicate Documents Attached To This Application

☒ Application Fee: Amount \$

☒ Facility Map or Maps  
☐ Ground Water Report

☒ Facility Legal Description  
☐ Closure Design

☒ Plan of Operation  
☐ Cost Estimates

☒ Waste Description  
☐ Financial Assurance

HEREBY CERTIFY THAT THIS INFORMATION AND ALL ATTACHED PAGES ARE CORRECT AND COMPLETE.

Signature of Authorized Owner Representative

Title President

Date 4/05/07

Name typed or printed  
Jeff Davis

Address

150 W. CIVIL CTR Drive, SANDY, UT 84020

Signature of Authorized Land Owner Representative (if applicable)

Title

Date

Address

Name typed or printed

Signature of Authorized Operator Representative (if applicable)

Title

Date

Address

Name typed or printed

## Utah Class III Landfill Permit Application Checklist

**Important Note:** The following checklist is for the permit application and addresses only the requirements of the Division of Solid and Hazardous Waste. Other federal, state, or local agencies may have requirements that the facility must meet. The applicant is responsible to be informed of, and meet, any applicable requirements. Examples of these requirements may include obtaining a conditional use permit, a business license, or a storm water permit. The applicant is reminded that obtaining a permit under the *Solid Waste Permitting and Management Rules* does not exempt the facility from these other requirements.

An application for a permit to construct and operate a landfill is documentation that the landfill will be located, designed, constructed, operated, and closed in compliance with the requirements of Rules R315-304 of the *Utah Solid Waste Permitting and Management Rules* and the *Utah Solid and Hazardous Waste Act* (UCA 19-6-101 through 123). The application should be written to be understandable by regulatory agencies, landfill operators, and the general public. The application should also be written so that the landfill operator, after reading it, will be able to operate the landfill according to the requirements with a minimum of additional training.

Copies of the *Solid Waste Permitting and Management Rules*, the *Utah Solid and Hazardous Waste Act*, along with many other useful guidance documents can be obtained by contacting the Division of Solid and Hazardous Waste at 801-538-6170. Most of these documents are available on the Division's web page at [www.hazardouswaste.utah.gov](http://www.hazardouswaste.utah.gov). Guidance documents can be found at the solid waste section portion of the web page.

When the application is determined to be complete, the original complete application and one copy of the complete application are required along with an electronic copy.

### Part II Application Checklist

<b>I. Facility General Information</b>	
Description of Item	Location In Document
<b>1a. General Information For - All Facilities</b>	
Completed Part I General information	Application
General description of the facility (R315-310-3(1)(b))	Operations Plan, Page 1
Legal description of property (R315-310-3(1)(c))	Copy of deed record
Proof of ownership, lease agreement, or other mechanism (R315-310-3(1)(c))	Copy of deed record
A demonstration that the landfill is not a commercial facility	Operations Plan, Page 1
Waste type and anticipated daily volume (R315-310-3(1)(d))	Operations Plan, Page 1
Intended schedule of construction (R315-302-2(2)(a))	Landfill already constructed
<b>1b. General Information - New Or Laterally Expanding Class III Landfills</b>	
Documentation that the facility has meet the historical survey requirement of R315-302-1(2)(f) (R315-305-4(1)(b) or R315-305-4(2)(a)(iv))	N/A
Name and address of all property owners within 1000 feet of the facility boundary (R315-310-3(2)(i))	N/A
Documentation that a notice of intent to apply for a permit has been sent to all property owners listed above (R315-310-3(2)(ii))	N/A
Name of the local government with jurisdiction over the facility site (R315-310-3(2)(iii))	N/A

## Utah Class III Landfill Permit Application Checklist

<b>I. Facility General Information</b>		
	<b>Description of Item</b>	<b>Location In Document</b>
<b>Ic. Location Standards - New Class IIIa Landfills (R315-304-4(1))</b>		
Geology		N/A
	Geologic maps showing significant geologic features, faults, and unstable areas	N/A
	Maps showing site soils	N/A
Surface water		N/A
	Magnitude of 24 hour 25 year and 100 year storm events	N/A
	Average annual rainfall	N/A
	Maximum elevation of flood waters proximate to the facility	N/A
	Maximum elevation of flood water from 100 year flood for waters proximate to the facility	N/A
Wetlands		N/A
Ground water		N/A
Historic Preservation Survey		N/A
<b>Id. Additional Location Standards - New Class IIIa Landfills Not On Waste Generation Site</b>		
	Land use compatibility (R315-304-4(1)(a))	N/A
	Maps showing the existing land use, topography, residences, parks, monuments, recreation areas or wilderness areas within 1000 feet of the site boundary	N/A
	Certifications that no ecologically or scientifically significant areas or endangered species are present in site area	N/A
	List of airports within five miles of facility and distance to each	N/A
<b>Ie. Location Standards - New Class IIIb Landfills</b>		
	Floodplains as specified in R315-302-1(2)(c)(ii) (R315-304-4(2)(a)(i))	N/A
	Wetlands as specified in R35-302-1(2)(d) (R315-304-4(2)(a)(ii))	N/A
	The landfill is located so that the lowest level of waste is at least ten feet above the historical high level of ground water (R315-304-4(2)(a)(iii))	N/A
	Historical Preservation Survey (R315-304-4(2)(a)(iv))	N/A
<b>If. Plan of Operations - All Class III Landfills (R315-310-3(1)(e) and R315-302-2(2))</b>		
	Description of on-site waste handling procedures and an example of the form that will be used to record the weights or volumes of waste received (R315-302-2(2)(b) And R315-310-3(1)(f))	Operations Plan, Sections 3.1.3 and 3.1.4
	Schedule for conducting inspections and monitoring, and examples of the forms that will be used to record the results of the inspections and monitoring (R315-302-2(2)(c), R315-302-2(5)(a), and R315-310-3(1)(g))	Operations Plan, Section 3.1.23

## Utah Class III Landfill Permit Application Checklist

<b>I. Facility General Information</b>	
Description of Item	Location In Document
Contingency plans in the event of a fire or explosion (R315-302-2(2)(d))	Operations Plan, Section 3.1.16
Plan to control fugitive dust generated from roads, construction, general operations, and covering the waste (R315-302-2(2)(g))	Operations Plan, Section 3.1.6
Plan for letter control and collection (R315-302-2(2)(h))	Operations Plan, Section 3.1.15
Procedures for excluding the receipt of prohibited hazardous or PCB containing wastes (R315-302-2(2)(j))	Operations Plan, Section 3.1.3
Procedures for controlling disease vectors (R315-302-2(2)(k))	Operations Plan, Section 3.1.24
A plan for alternative waste handling (R315-302-2(2)(l))	Operations Plan, Section 3.1.2
A general training and safety plan for site operations (R315-302-2(2)(o))	Operations Plan, Section 3.1.25
Any recycling programs planned at the facility (R315-303-4(6))	Operations Plan, 2.0
Any other site specific information pertaining to the plan of operation required by the Executive Secretary (R315-302-2(2)(p))	No additional information
<b>Ig. Ground Water Monitoring - Class IIIa landfills</b>	
Ground Water Monitoring Plan (R315-304-5(4)(a))	N/A
<b>II Facility Technical Information</b>	
<b>IIa. Maps - All Class III Landfills</b>	
Topographic map drawn to the required scale with contours showing the boundaries of the landfill unit, ground water monitoring well locations, gas monitoring points, and the borrow and fill areas (R315-310-4(2)(a)(i))	Operations Plan
Most recent U.S. Geological Survey topographic map, 7-1/2 minute series, showing the waste facility boundary; the property boundary; surface drainage channels; any existing utilities and structures within one-fourth mile of the site; and the direction of the prevailing winds (R315-310-4(2)(a)(ii))	Operations Plan
<b>IIb. Geohydrological Assessment - Class IIIa Landfills (R315-310-4(2)(b))</b>	
Local and regional geology and hydrology including faults, unstable slopes and subsidence areas on site (R315-310-4(2)(b)(i))	N/A
Evaluation of bedrock and soil types and properties including permeability rates (R315-310-4(2)(b)(ii))	N/A
Depth to ground water (R315-310-4(2)(b)(iii))	N/A
Quantity, location, and construction of any private or public wells on-site or within 2,000 feet of the facility boundary (R315-310-4(2)(b)(v))	N/A
Tabulation of all water rights for ground water and surface water on-site and within 2,000 feet of the facility boundary (R315-310-4(2)(b)(vi))	N/A

## Utah Class III Landfill Permit Application Checklist

<b>I. Facility General Information</b>	
<b>Description of Item</b>	<b>Location In Document</b>
Identification and description of all surface waters on-site and within one mile of the facility boundary (R315-310-4(2)(b)(vii))	N/A
For an existing facility, identification of impacts upon the ground water and surface water from leachate discharges (R315-310-4(2)(b)(viii))	N/A
Calculation of site water balance (R315-310-4(2)(b)(ix))	N/A
<b>//c. Engineering Report - Plans, Specifications, And Calculations - All Class III Landfills</b>	
Unit design to include cover design; fill methods; and elevation of final cover including plans and drawings signed and sealed by a professional engineer registered in the State of Utah, when required (R315-310-3(1)(b))	Closure and Post Closure Plan
Design and location of run-on and run-off control systems (R315-310-5(2)(b))	Operations Plan, 3.1.8
<b>//d. Engineering Report - Plans, Specifications, And Calculations - Class IIIa Landfills</b>	
Engineering reports required to meet the location standards of R315-304-4 including documentation of any demonstration or exemption made for any location standard (R315-310-4(2)(c)(i))	N/A
Anticipated facility life and the basis for calculating the facility's life (R315-310-4(2)(c)(ii))	N/A
Equipment requirements and availability (R315-310-4(2)(c)(iii))	N/A
Identification of borrow sources for daily and final cover and for soil liners (R315-310-4(2)(c)(iv))	N/A
Run-off treatment and disposal and documentation to show that any treatment system is being or has been reviewed by the Division of Water Quality (R315-310-4(2)(c)(v) and R315-310-3(1)(i))	N/A
<b>//e. Closure Requirements - All Class III Landfills</b>	
Closure plan (R315-310-3(1)(h))	Closure and Post Closure Plan - A, B
Closure schedule (R315-310-4(2)(d)(i))	Closure and Post Closure Plan - B
Design of final cover (R315-310-4(2)(c)(iii))	Closure and Post Closure Plan - B
Capacity of site in volume and tonnage (R315-310-4(2)(d)(ii))	Permit Application Form, Page 2
Final inspection by regulatory agencies (R315-310-4(2)(d)(iii))	Closure and Post Closure Plan - C
<b>//f. Post-Closure Care Requirements - All Class III Landfills</b>	
Post-closure care plan (R315-310-3(1)(h))	Closure and Post Closure Plan - E
Changes to record of title, land use, and zoning restrictions (R315-310-4(2)(e)(ii))	N/A
Maintenance activities to maintain cover and run-on/run-off control systems (R315-310-4(2)(e)(iii))	Closure and Post Closure Plan - E



## Utah Class III Landfill Permit Application Checklist

<b>I. Facility General Information</b>	
Description of Item	Location In Document
List the name, address, and telephone number of the person or office to contact about the facility during the post-closure care period (R315-310-4(2)(e)(vi))	Operations Plan, 3.1.1
<b>IIg. Financial Assurance Requirements - All Class III Landfills</b>	
Identification of closure costs including cost calculations (R315-310-4(2)(d)(iv))	Closure and Post Closure Plan
Identification of post-closure care costs including cost calculations (R315-310-4(2)(e)(iv))	Closure and Post Closure Plan
Identification of the financial assurance mechanism that meets the requirements of Rule R315-309 and the date that the mechanism will become effective (R315-309-1(1) and R315-310-3(1)(j))	Letter of Credit (2/1/08)

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PAGE 334

MARGARET R. EVANS - BOX ELDER COUNTY RECORDER

WARRANTY DEED

Deputy

AUSTIN NISH and MARY NISH, his wife; GARY A. NISH and SUSAN NISH, his wife; HYRUM ROYCE NISH and JANA LEE NISH, his wife; BETTY JANAE CAPENER and LAMAR C. CAPENER, her husband; NOREEN N. CHRISTENSEN and J. ALLAN CHRISTENSEN, her husband,

GRANTORS

of Plymouth, Box Elder County, State of Utah, hereby CONVEY and WARRANT to

THE DAVID J. JOSEPH COMPANY, a corporation

of Cincinnati, Ohio

GRANTEE

for the sum of Ten (\$10.00) Dollars and other valuable consideration the following described property situate in Box Elder County, Utah, to-wit:

A part of the S.1/2 of the N.1/2 of Section 4. T.13.N.R.3.W.S.L.B & M., Beg., at the W.1/4 corner of Sec.4.T.13.N.R.3.W.S.L.B & M., running thence N.0°07'20" E.1321.12 ft to the N.line of the S.1/2 of the N.1/2 of said Section 4; th.S.89°53'36" E 3831.34 ft along said N.line to the West Bank of the Malad River, thence southerly along said west bank the following eleven courses: S.30°15'58" E.148.94 ft; S.6°16'54" E.98.56 ft; S.7°19'24" W.348.23 ft; S.8°42'13" E.115.43 ft; S.26°05'05" W.107.18 ft; S.24°05'01" E.222.37 ft; S.66°16'37" E.53.15 ft; N.66°37'29" E.206.60 ft; S.47°17'21" E.50.61 ft; S.6°19'11" W. 306.35 ft; and S.33°36'31" W.66.37 ft to the south line of the South one half of the North one half of said Section 4; thence N.89°55'56" W. 4141.73 ft to the point of beg., Less O.S.L.R.R. property.

Which property has previously been described of record as follows:

The S.1/2 of the N.1/2 of Section 4.T.13.N.R.3.W. S.L.M., lying West of the Malad River, less railroads.

WITNESS the hands of said grantors this 7<sup>th</sup> day of July, 1980.

Signed in the presence of:

*[Handwritten signatures of witnesses]*

*Austin Nish*  
Austin Nish  
*Mary Nish*  
Mary Nish, his wife  
*Gary A Nish*  
Gary A. Nish  
*Susan Nish*  
Susan Nish, his wife  
*Hyrum Royce Nish*  
Hyrum Royce Nish  
*Jana Lee Nish*  
Jana Lee Nish, his wife

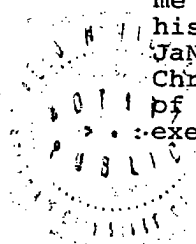
Signed in the presence of:

Reed H. Duffell  
Reed H. Duffell  
Reed H. Duffell  
Reed H. Duffell

Betty Janae Capener  
 Betty Janae Capener  
LaMar C. Capener  
 LaMar C. Capener, her husband  
Noreen N. Christensen  
 Noreen N. Christensen  
J. Allan Christensen  
 J. Allan Christensen, her husband

STATE OF UTAH )  
 ) ss  
 COUNTY OF BOX ELDER )

On the 7<sup>th</sup> day of July, 1980 personally appeared before me Austin Nish and Mary Nish, his wife, Gary A. Nish and Susan Nish, his wife; Hyrum Royce Nish and Jana Lee Nish, his wife, Betty Janae Capener and LaMar C. Capener, her husband and Noreen N. Christensen and J. Allan Christensen, her husband, the signers of the within instruction who duly acknowledged to me that they executed the same.



Reed H. Duffell  
 Notary Public  
 Residing at Brigham City, Utah

My Commission Expires:  
 Jan. 8, 1982

**PLYMOUTH LANDFILL  
OPERATIONS PLAN**



**Prepared for:**

**Western Metals Recycling, LLC  
7400 West Cemetery Road  
Plymouth, Utah 84330**

**Last revised on 02/19/2008**

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### ADDENDUMS (follow text)

ADDENDUM 1 PCB SAMPLING PROCEDURE

ADDENDUM 2 BORING LOG REPORT

ADDENDUM 3 FEMA FLOOD ZONE MAP

ADDENDUM 4 CONUS WETLANDS MAP

ADDENDUM 5 CLOSURE AND POST CLOSURE CARE PLAN AND COST ESTIMATES

### FIGURES (follow addendums)

FIGURE 1 SITE LOCATION MAP

- FIGURE 2 TOPOGRAPHIC MAP
- FIGURE 3 SATELLITE PHOTO
- FIGURE 4 STORM WATER DRAINAGE MAP
- FIGURE 5 CONCEPTUAL CLOSURE DRAWING (PROFILE)
- FIGURE 6 CONCEPTUAL CLOSURE DRAWING

## **1.0 INTRODUCTION**

This is an updated Operations Report for The David J. Joseph Company's Plymouth Landfill located in Plymouth, Utah. The Operations Report addresses requirements associated with the ongoing landfill operations and the future mining process.

## **2.0 BACKGROUND**

The Plymouth Landfill is located at 7400 W. 21200 North, West Cemetery Road, Plymouth, Utah 84330. It is situated adjacent to a metal shredding facility that generates the waste being deposited.

Active landfill operations occur on approximately 22.5 acres at the west side of the property. Waste is deposited in cells that are prepared by excavating soils, which are then deposited as intermediate cover on already filled cells in the landfill. The subgrade of the landfill consists of pale yellowish brown clayey silt with some gravel changing to silty gravel at 35 feet below land surface. A boring log report is found in Addendum 2.

Based upon data collected from onsite groundwater wells, groundwater is approximately 90 feet below land surface traveling in a south by southeast direction.

The David J. Joseph Company plans to mine the landfill for extraction of non-ferrous metals from the previously deposited fluff. This will be accomplished by excavating the material from old cells, running the material through an eddy current separation system that will be constructed onsite, then re-depositing the material back into a new cell.

## **3.0 LANDFILL OPERATIONS**

The landfill operations are controlled primarily by two persons employed by The David J. Joseph Company and its subsidiary Western Metals Recycling, LLC. These include:

- The Plant Manager, Mr. Jardee Steed, who has been assigned overall responsibility for operation and maintenance of Plymouth Landfill by The David J. Joseph Company and Western Metals Recycling, LLC.
- The David J. Joseph Company Staff Engineer, Eric Logsdon, who has been assigned the responsibility for periodically monitoring landfill operations and

management to assess compliance with applicable laws, regulations, and conditions; and providing/coordinating technical assistance when needed.

The only other organization with specifically-scheduled activities is the environmental sampling and analysis contractor. The David J. Joseph Company currently contracts these services with Global Environmental Technologies LLC.

### **3.1 OPERATIONAL INFORMATION**

#### **3.1.1 Designation of Responsible Person(s)**

The person responsible for the operation and maintenance of the Plymouth Landfill is the Plant Manager, Mr. Jardee Steed. He can be reached at the following:

Mr. Jardee Steed, Plant Manager  
Western Metals Recycling, LLC  
7400 W. 21200 North  
West Cemetery Road  
Plymouth, UT 84330  
(435) 458-3851  
(435) 458-3601 (Fax)

For matters involving permitting or enforcement, the person responsible for the Plymouth Landfill is the Corporate Environmental Manager, Mr. Eric Logsdon. He can be reached at the following:

Mr. Eric Logsdon  
The David J. Joseph Company  
300 Pike Street  
Cincinnati, OH 45202-4214  
(513) 419-6200  
(513) 345-4363 (Fax)

#### **3.1.2 Contingency Operations**

In the event that the landfill cannot be used due to emergency or a natural disaster, the Plymouth Landfill will temporarily refuse to accept waste material. This action should not create a significant public inconvenience, since the Plymouth Landfill accepts waste only from The David J. Joseph Company & its



subsidiaries. If the Landfill experiences a disruption of operations for a significant period of time, the waste stream generated by facility operations will be rerouted and disposed at a commercial solid waste facility.

If normal operations are interrupted due to primary and/or back-up equipment failure, the Landfill Operator must immediately notify the Plant Manager.

### **3.1.3 Control of Waste Received**

Only fluff, debris and non-hazardous TPH contaminated soils from The David J. Joseph Company's own operations are permitted to be disposed in the landfill. Periodic testing is performed on the fluff from the scrap metal recovery process. This testing includes analysis for PCBs, and TCLP RCRA Metals. Samples are collected in accordance with the fluff sampling procedure found in Addendum 1, with results retained in the David J. Joseph Company's corporate office.

The Landfill Operator shall verify that no unacceptable materials are deposited by observing each dumped load of waste material prior to spreading and compacting. If unacceptable materials are observed, they must be loaded onto a truck and transported to an appropriate permitted landfill for disposal.

During operating hours, the Landfill Operator is responsible for monitoring site activities and preventing unauthorized disposal or trespassing. When the landfill is closed, unauthorized disposal shall be inhibited by locking all access gates.

### **3.1.4 Waste Measurement**

The amount of waste shipped to the landfill is estimated based on the total amount of scrap produced at The David J. Joseph Company's shredding operations. This is currently based upon a correlation between the weight of fluff produced versus the weight of scrap processed. Since the landfilled waste is generated only by The David J. Joseph Company's operations, this provides a reasonable estimate of the quantity of incoming waste provided that accurate records of the source of fluff are maintained.

The Plant Manager maintains summaries of the estimated waste generation quantities.

### **3.1.5 Vehicle Traffic Control and Unloading**

There is a single access road permitting access to the site from the Plymouth scrap metal recycling yard. Since this is a private landfill accepting waste only from The David J. Joseph Company's own operations, no special traffic controls or signs are required.

The Landfill Operator will check incoming trucks upon arrival and will provide the drivers with instruction as to where to dump their loads. While the landfill is below grade, the Landfill Operator should exercise extreme care during unloading operations. Once the landfill reaches above the surrounding grade, the trucks will resume normal operation and drive directly onto the landfill surface to discharge their loads.

### **3.1.6 Method and Sequence of Filling Waste**

The Landfill Operator shall direct placement of the waste in a manner to maintain thin waste layers, and shall sequence waste filling operations in a way that is conducive to both land filling and the mining process.

The Plant Manager is also responsible for assuring the control of odors and fugitive particulates arising from landfill operations. Such control shall prevent the creation of these nuisance conditions on adjoining properties. Experience indicates that this is typically not an issue with fluff landfills. When required, dust generated from general operations and covering the waste will be achieved primarily through application of water. Dust generated on roads by vehicle traffic will primarily be controlled via speed limits and the application of water on an as needed basis.

### **3.1.7 Waste Compaction and Application of Weekly and Intermediate Cover**

Landfill waste will be spread utilizing a bulldozer and/or front-end loader, and be compacted utilizing various pieces of heavy mobile equipment. The fluff will be spread in approximately 1- to 2-foot-thick lifts and compacted by 4 to 5 passes of the equipment.

Periodically, a 6-inch-thick compacted soil cover will cover exposed waste with the exception of the working face. This soil cover will be spread and compacted using the site bulldozer and/or front-end loader. The reason for not placing intermediate cover on a monthly basis is to enhance the performance of the landfill. The nature of the waste being deposited lends itself to benefits from exposure to the atmosphere. The waste during the processing of scrap metal becomes saturated with water. At the point of disposal, the waste may have a moisture content as high as 30% by weight. By not placing the intermediate cover, the low humidity evaporates a significant amount of the water, thus eliminating the generation of leachate.

The perimeter barriers around the landfill are more than adequate at controlling loose or blowing material because the shape, weight and consistency of the waste does not allow it to be caught and carried by the wind. Furthermore, the mining operations would be greatly impeded by the use of intermediate cover during the excavation process.

### **3.1.8 Operations of Storm Water and Gas Controls**

Due to the nature of the waste, a methane gas collection system is not applicable to the site. The material being land filled consists of plastics, glass, and wood. These components do not rapidly breakdown and form methane gas.

Storm water controls are built into the design of the Plymouth landfill. The 25 year 24 hour storm event for the Plymouth landfill site is 2.5 inches, as reported in the Technical Paper No. 40 "Rainfall Frequency Atlas of the United States". Currently the permitted landfill area (22.5 acres) has a perimeter berm established that measures approximately 12 feet above the surface elevation.

See Figure 6 for detail. Historically, the landfill cells were excavated below the natural grade to create cells for waste disposal. Currently, all activities are above the natural grade. The berm in conjunction with activities above the natural grade prevent storm water run-on into the active area.

The site's general topography has a significant (2.66%) slope from west to east. The permitted section of the landfill is on the west side of the property. As sections of the landfill are filled, the side walls of the landfill will be graded at a 3:1 slope and covered with clay soils. This layer will be mechanically compacted in place. The top sections of the landfill will also be covered with clay soils and mechanically compacted. The top will be graded at a 2% slope to the north and south from the centerline of the landfill. This design minimizes the potential for storm water to run on the active working face. A conceptual drawing of the final grades are supplied as an attachment (Figure 5), however, it is likely that additional landfill space will be permitted in the future at this location.

### **3.1.9 Groundwater Monitoring**

Groundwater monitoring is generally performed biannually. The site consists of 5 groundwater monitoring wells strategically placed around the landfill and property. The results of groundwater monitoring events are reviewed and retained in The David J. Joseph Company's corporate office.

Sampling events are analyzed for the following parameters.

- Oil & Grease
- Dissolved Metals
- Total Metals
- TDS / TOC
- TSS
- COD
- Amonia
- Cyanide
- Nitrate

Each time that groundwater samples are collected, the following field parameters shall be recorded:

**Field Parameters**

- Static water level in wells prior to purging
- Specific conductance
- pH
- Temperature
- Colors and/or sheens

**3.1.10 Surface Water Monitoring**

The site has a storm water discharge permit issued by the state of Utah. Due to the large surface area of the site, a discharge of storm water has yet to be recorded. Sampling equipment is retained on site in the event a significant rain event occurs resulting in a discharge. The parameters analyzed are found in our storm water discharge permit.

**3.1.11 Leachate Monitoring**

The generation of leachate is avoided by controlling the moisture content of the fluff through evaporation, and controlling storm water running into the open face of the landfill.

**3.1.12 All Weather Access Roads**

The Plant Manager shall be responsible for maintaining the access roads in an acceptable condition.

### **3.1.13 Effective Barrier**

When the landfill is not in use, the Landfill Operator will move a steel gate across the site entrance and manually lock it to prevent unauthorized access. The Landfill Operator will not permit unauthorized access or disposal during operating hours.

### **3.1.14 Sign Indicating Name of Operating Authority**

The sign located near the yard entrance and the no trespassing signs posted around the property perimeter shall be maintained. The Landfill Operator is responsible for inspecting the signs and reporting deterioration or damage to the Plant Manager.

### **3.1.15 Litter Control Devices**

Due to the nature of the fluff (consistency similar to peat moss), no special litter controls have been implemented or are deemed necessary.

### **3.1.16 Fire Protection and Fire-Fighting Facilities**

On-site fire protection equipment consists of small fire extinguishers stored within site equipment. The site bulldozer, and/or front-end loader can also be used to extinguish small fires by spreading dirt over burning matter. A stockpile of at least 100 tons of dirt shall be readily available in the event of a fluff pile fire.

At the end of each operating the day, the bulldozer and all other heavy mobile equipment will not be parked on the working face of the landfill.

### **3.1.17 Attendant**

The Landfill Operator is on-site during all operating hours, and is in control of daily landfill operations.

### **3.1.18 Communication Facilities**

The Landfill Operator is equipped with a cellular phone and / or radio to summons assistance in the event of an emergency.

### **3.1.19 Adequate In-Service and Reserve Equipment**

In the event that the site equipment is disabled, miscellaneous heavy equipment may be brought out from the operating yard, or rented from a local equipment supplier to keep landfill operations ongoing.

### **3.1.20 Safety Devices on Equipment to Shield and Protect Operators**

Each piece of equipment is equipped with a fire extinguisher to fight small fires. A first-aid kit is available in the office trailer for minor personal injuries. The Landfill Operator will wear steel-toed shoes as personal protective equipment.

### **3.1.21 Flood Zone Information**

The entire property that the landfill is situated on is not within any flood zone regions based on a search of the FMEA website of flood zone maps. Attached is a map of the area where the facility is located.

### **3.1.22 Wetlands Information**

The entire property that the landfill is situated on is not within any wetlands areas based on a search of the Conus Wet Scan website of established wetland regions. Attached is a map of the area where the facility is located.

### **3.1.23 Inspections and Monitoring**

Periodic inspections of the landfill will be conducted. The inspections address the following (but are not limited to): effectiveness of weekly and intermediate cover, storm water controls, integrity of site gates and fencing, and fugitive dust controls. Groundwater monitoring will be conducted as described in section 3.1.9 of this plan.

#### **3.1.24 Procedures for Controlling Disease Vectors**

Due to the composition of the fluff that land filled, no specific procedures for controlling disease vectors have been implemented. If it is determined that such controls are needed, they will be incorporated into this plan as standard operating procedures.

#### **3.1.25 Site Safety Plan**

All OSHA training required for the standard operating procedures found in this plan is provided on an annual basis. All personnel at the landfill are responsible for knowing the proper procedures for accidents, injuries, and fires. All emergency procedures are revised as necessary to keep them up-to-date. Safety meetings are regularly scheduled. Topics of discussion are varied and can include situations that can cause accidents and ways to prevent them.



**ADDENDUM 1**  
**PCB SAMPLING PROCEDURE**

**The David J. Joseph Co.**

**Sample Collection Procedure for PCB Analysis of Automobile Shredder Residue**

**Date: January 7, 2000**

**Purpose:**

This document was written based on interpretations of the Title 40 Part 761 Subpart R – Sampling Non-Liquid, Non Metal PCB Bulk Product Waste for Purposes of Characterization for PCB Disposal.

**Overview:**

This process details the specific procedure that should be followed when collecting a sample of fluff from the generating source. The sample should be collected at the discharge point of the eddy current. If no eddy current exists, then the sample should be collected at the fluff discharge point off the shredder. The sample will be collected over a period of 8 hours of operation. The start time of sample collection will be determined randomly. This number will determine how many minutes after the start of processing that the first 5-gallon sample should be collected. One 5-gallon sample should then be collected every 60 minutes of operation until a total of 8 samples have been collected. The samples will be combined and a representative sample will be collected from this composite.

**Sampling Equipment:**

- 1 steel drum with securing lid (55 gallon capacity)
- 1 drum liner (polyethylene insert)
- 2 clean 5-gallon plastic pails labeled A and B
- 1 new 5-gallon plastic bucket with lid labeled C
- Plastic tarp 12 ft by 12 ft square
- 1 30-sided die
- 1 8-sided die

**Procedure:**

**Step 1**

Prepare a 55-gallon drum by inserting a new polyethylene liner inside the drum. Label the drum as "Fluff Sampling Drum". We have included a label that will identify the drum and allow for tracking of the times for all eight samples that are collected to make up the composite.

**Step 2**

Select a designated employee to conduct the sample collection for one entire sampling event. Instruct all employees that nothing is to be placed in the drum except for the samples collected by the designated employee. Keep a lid on the drum to discourage people from using the container for trash or other debris. Place the drum in a secure location close to the point of fluff generation.

- Step 3** Use the 30-sided die to determine the random start time. Rolling the die and multiplying by 2 determines the number of minutes after initial startup that the first sample should be collected.
- Step 4(a)** To collect the sample, use the clean plastic 5-gallon pail identified as A. Collect 5 gallons of fluff by holding the pail at the edge of the conveyor where the material falls into the truck or pile for disposal. Do this by allowing the material to fill the pail above the rim. Do not compact the sample into the pail when filling. When the pail is completely full, brush off the excess fluff over the edges of the rim to level the sample. If the conveyor system does not safely allow for the collection of the sample at this location, then proceed to the sample collection described in Step 4(b). If the sample is able to be collected via this method, continue with Step 5.
- Step 4(b)** To collect the sample, the conveyor that delivers the fluff to the disposal truck or pile must be shut down. When the conveyor has stopped, the fluff must be scooped off the belt with a hand shovel. Avoid scraping the belt, as the intent is to collect a representative sample, not clean the belt in the sample area. Collect all of the material from the furthest accessible point on the conveyor, back towards the line until the 5-gallon bucket is full.
- Step 5** Note the time that the sample was taken. This time should be written on the drum label. The next sample should be taken after exactly 60 minutes of operation. If the line is shut down for any period of time, the 60-minute timer should be stopped. When the line is restarted, start the 60-minute clock and complete the incomplete portion of the 60-minute interval.
- Step 6** Remove the lid from the 55-gallon drum and empty the 5-gallon sample into the drum. Replace the lid on the 55-gallon drum.
- Step 7** Repeat Step 4, Step 5, and Step 6 until all 8 samples are collected. If the employee designated for collecting the sample is unable to collect the sample at the required time, they must arrange for another qualified individual to continue collecting the samples. If the process of generating fluff is stopped and will not resume until the following day, the lid on the drum should be secured with a bung ring and locked to prevent tampering of the sample. The time the process shuts down should be noted. When the line is restarted the next day, start the 60-minute clock and complete the incomplete portion of the 60-minute interval from the day before.
- Step 8** When the eighth sample is placed in the drum, secure the lid to the drum. Tip the drum on its side and roll it a minimum of 10 complete revolutions. This equates to a total distance of 63 linear feet that the drum must roll.
- Step 9** Open up and lay out the new plastic tarp on a level area. Empty the contents of the 55-gallon drum onto the center of the tarp. Using the 5-

gallon bucket identified as B, make 8 equal piles from the one large pile. These smaller piles will also be placed on the tarp. Number the piles 1 through 8. Use an eight sided die to determine which of the eight samples will be sent in for analysis.

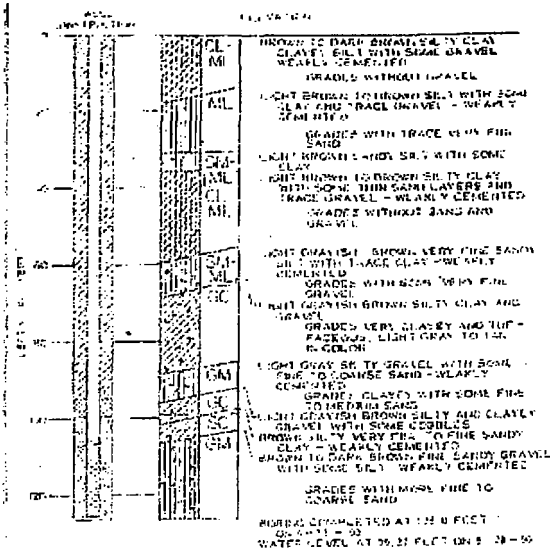
***Step 10***

Place the selected pile in the third 5-gallon bucket, identified as C, and secure the lid on the sample. The sample should be properly identified and sent with a chain of custody document to the appropriate lab. The sample collection date will be the date the sample collection is completed.

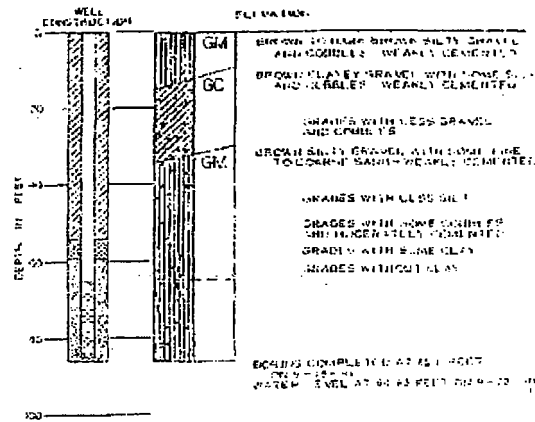
Any questions regarding this procedure should be addressed with the David J. Joseph Company's corporate Environmental Health & Safety Staff.

**ADDENDUM 2**  
**BORING LOG REPORT**

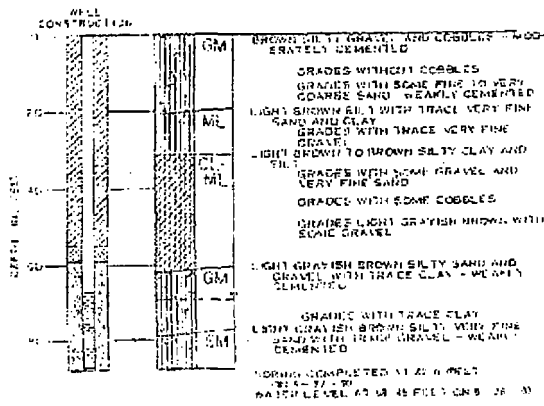
### BORING 1



### BORING 2



### BORING 3



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WELL CONSTRUCTION

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YELLOWISH BROWN CLAYEY GRAVEL WITH  
SOME FINE LOW PLASTICITY  
CLAYEY MORE SILT  
YELLOWISH BROWN SILTY GRAVEL WITH  
SOME FINE TO COARSE SAND

GRAVEL MORE GRAVEL  
WITH COBBLES

GRAVEL WITH SOME CLAY

GRAVEL MOST

WATER COLUMN AT 89.92 FEET  
ON 11-24-62

GRAVEL WITH  
MORE COBBLES

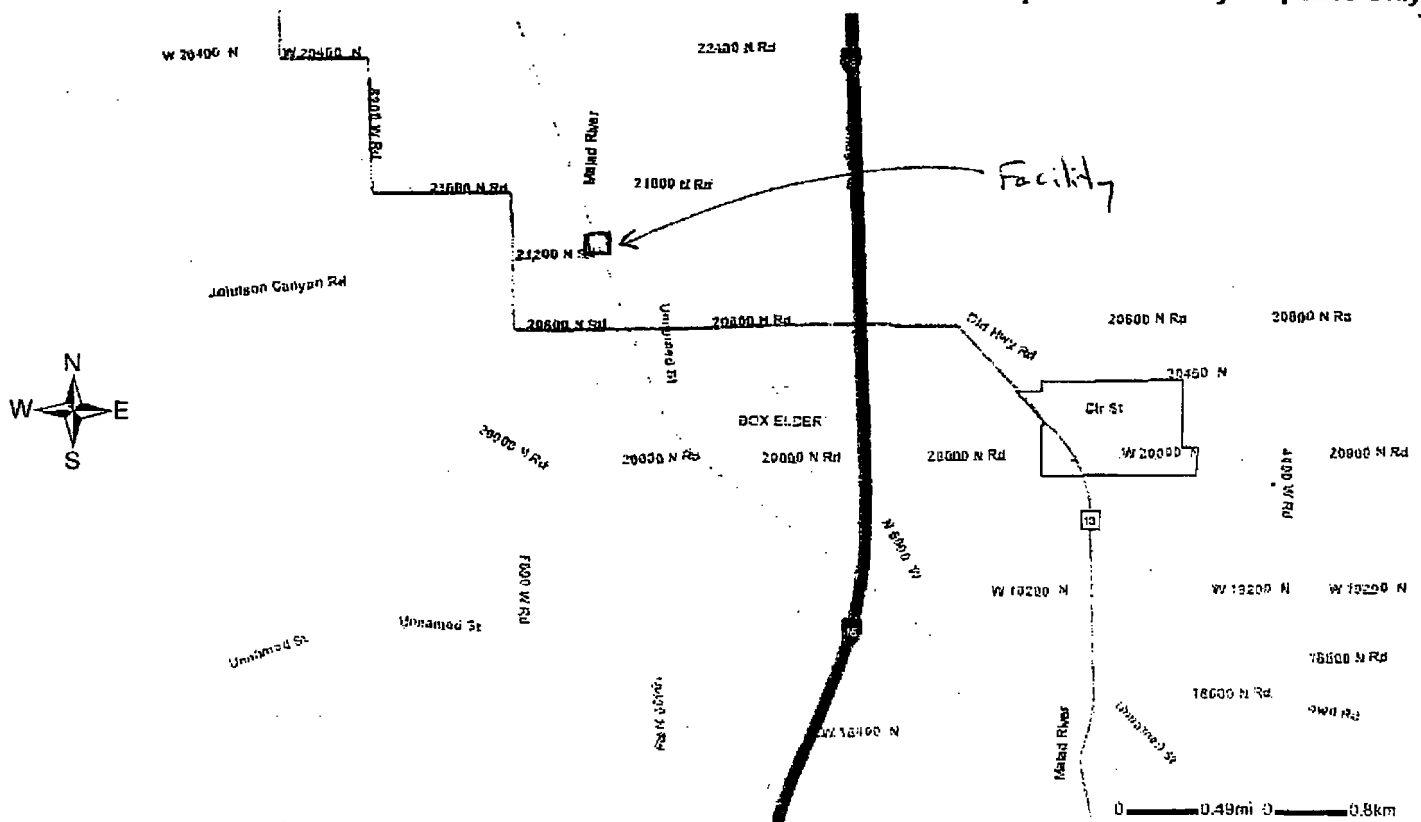
BORING COMPLETED AT 87.0 FEET  
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Dames & Moore




















































**ADDENDUM 3**  
**FEMA FLOOD ZONE MAP**



**This Map Is For Advisory Purposes Only**



### Legend

- |   |   |   |  |   |                                |
|---|---|---|--|---|--------------------------------|
|  | <b>Q3 Flood Hazards</b>                     |  | <b>Political Jurisdictions</b>               |  | <b>Water: Ponds and Pools</b>  |
|  | <b>Special Flood Hazard Areas</b>           |  | <b>National Communities</b>                  |  | <b>State Parks and Forests</b> |
|  | <b>County Boundary</b>                      |  | <b>Streets</b>                               |  | <b>Local Parks</b>             |
|  | <b>LOMR's</b>                               |  | <b>Major Highways</b>                        |  | <b>Minor Rivers</b>            |
|  | <b>Flood Hazard Zones</b>                   |  | <b>Highways</b>                              |  | <b>Lakes, Major Rivers</b>     |
|  | <b>Zone A</b>                               |  | <b>Minor Roads</b>                           |  | <b>Land Areas</b>              |
|  | <b>Zone AC</b>                              |  | <b>Streets</b>                               |  | <b>US</b>                      |
|  | <b>Zone AN</b>                              |  | <b>Railroads</b>                             |  | <b>Other Countries</b>         |
|  | <b>Zone AO</b>                              |  | <b>Railroads</b>                             |  |                                |
|  | <b>Zone AR</b>                              |  | <b>States</b>                                |  |                                |
|  | <b>Zone AS</b>                              |  | <b>Cities</b>                                |  |                                |
|  | <b>Zone V</b>                               |  | <b>Other Places: 1-2,500</b>                 |  |                                |
|  | <b>Zone VE</b>                              |  | <b>Small Towns: 2,500-10,000</b>             |  |                                |
|  | <b>Zone D</b>                               |  | <b>Small Cities: 10,000-100,000</b>          |  |                                |
|  | <b>0.2% Annual Chance Flood Hazard Zone</b> |  | <b>State Largest Cities: 100,000-300,000</b> |  |                                |
|  | <b>Floodways</b>                            |  | <b>Major Cities = 1,000,000</b>              |  |                                |
|  | <b>Streams</b>                              |  | <b>Parks</b>                                 |  |                                |

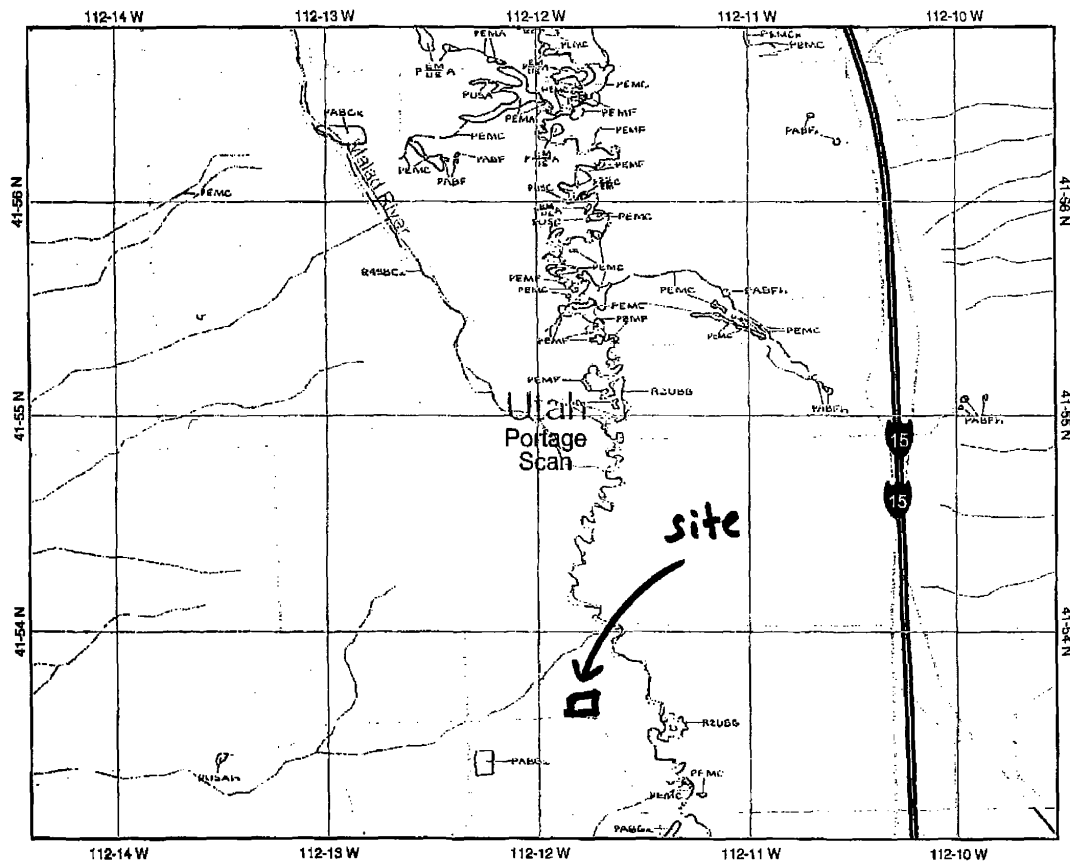


# FEMA

Friday, 30 March 2007 14:19

**ADDENDUM 4**  
**CONUS WETLANDS MAP**

# DJJ Plymouth Landfill



## Legend

CONUS\_wet\_scan

- 0
- 1
- Out of range
- Interstate
- Major Roads
- Other Road
- Interstate
- State highway
- US highway
- Roads
- Cities
- USGS Quad Index 24K
- Lower 48 Wetland Polygons
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Lower 48 Available Wetland Data
- Non-Digital
- Digital
- No Data
- Scan
- NHD Streams
- Counties 100K
- Urban Areas 300K
- States 100K
- South America



Scale: 1:66,368

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Map center: 41° 54' 55" N, 112° 11' 58" W

**ADDENDUM 5**

**CLOSURE AND POST CLOSURE-CARE PLAN AND COST ESTIMATES**

# **Closure and Post Closure Plan**

Prepared for:

**Plymouth Landfill  
7400 West Cemetery Road  
Plymouth, Utah 84330**

February 2008

#### **A. PARTIAL LANDFILL CLOSURE**

a. The facility will manage landfill growth within its established perimeter in a manner that minimizes the open working face of the landfill. Since the material qualifies as alternate daily cover, intermediate cover of the landfilled materials is not required.

b. Each closed cell or section of the landfill will be covered with 12-24 inches of compacted soil cover and graded to a 2% slope to convey rainfall to perimeter conveyances.

#### **B. CLOSURE**

a. Prior to closure, all remaining exposed fluff at the facility will be placed into the open cells of the landfill, and covered with a minimum of 18 inches of compacted soil and 6 inches of top soil. The final cover depth will be leveled to the extent practicable. The grade of surface slopes will not be less than 50:1 and the grade of side slopes more than 1:3 except where construction integrity and the integrity of erosion control can be demonstrated at steeper slopes. The final cover will be seeded with grass, or other shallow rooted, native vegetation. All closure fences at the entrance to the landfill, inspection roads, and ditches shall also be constructed, as needed.

b. The stockpiled overburden from excavation at the site may be used in construction of the final cover.

c. At least 180 days prior to the anticipated date of closure, the facility will submit a detailed closure plan for approval of the design for the Plymouth Landfill and a "Notice of Intent to Close" to the Executive Secretary. The Notice will indicate the following:

1. That the entire Plymouth Landfill shall be closed;
2. The anticipated date of closure commencement;

3. A preliminary schedule of closure;
4. Closure drawings;

### **C. CLOSURE CERTIFICATION**

a. The facility will submit certification that the landfill was closed according to the closure plan. The certification will include (if required):

1. As built drawings submitted to the Executive Secretary within 90 days of completion of closure activities.

### **D. CLOSURE PERFORMANCE STANDARDS**

a. Erosion control shall be provided for a minimum of 30 years after closure certification.

b. Based upon the contents of the landfill, no detection monitoring of air, gas, or groundwater is anticipated. If the Executive Secretary determines that detection monitoring is required, a revised Post-Closure Plan will be prepared and submitted.

### **E. POST-CLOSURE PLAN**

a. The vegetative cover on the closed landfill will be mowed and maintained on a regular schedule for a minimum of 30 years. The landfill cap will be inspected for erosion on a semi-annual basis for a minimum of 30 years. The landfill will also be inspected for woody plant growth that may penetrate the compact soil cap. If evidence of erosion is observed, the area will be reseeded and or re-graded as needed to insure the integrity of the vegetative cover and soil cap. Fences and gates will also be periodically inspected. If damage to fences or gates is observed, repairs will be made promptly to insure the landfill area is adequately secured.

## **CLOSURE AND POST-CLOSURE COSTS**



## CLOSURE AND POST-CLOSURE CARE COST ESTIMATES

### **I. Landfill Area**

- A. The total area of the landfill is 980,100 SF (22.5 acres). As of October 2007 approximately 5.6 acres of the landfill has received a final cover and is inactive. The following cost estimate reflects the maximum closure costs for the remaining 16.9 acres.

### **II. Closure Costs**

#### **A. Final Cover System**

1. Soils for the final cover system are available onsite.
2. Soil placement: 18' infiltration layer + 6' erosion layer = 24 in = 2 ft

- a. Volume of soil required: 16.9 acres = 81,796 yd<sup>2</sup>  
 $81,796 \text{ yd}^2 \times 2/3 \text{ yd} = 54,531 \text{ yd}^3$

- b. Soil placement

Spreading:  $54,531 \text{ yd}^3 \times \$2.40/\text{yd}^3 = \$130,874$

Compacting:  $54,531 \text{ yd}^3 \times \$0.60/\text{yd}^3 = \$32,719$

Sub total = \$163,593

x 10% contingency = \$16,359

Total = \$179,952

- c. Re-vegetation of landfill area

Seeding:  $16.9 \text{ ac} \times \$2,400/\text{ac} = \$40,560$

Fertilizer:  $16.9 \text{ ac} \times \$240/\text{ac} = \$4,056$

Mulch:  $16.9 \text{ ac} \times \$480/\text{ac} = \$8,112$

Sub total = \$52,728

x 10% contingency = \$5,273

Total = \$58,001

## B. Grading and Drainage

1. Ditches exist around the perimeter of the landfill except where roads cross into site. Elsewhere berms are present.

2. Assumed that 750 yd<sup>3</sup> of earthwork is required (additional soil is available onsite).

$$750 \text{ yd}^3 \times \$2.40/\text{yd}^3 = \$1,800$$

$$\text{Sub total} = \$1,800$$

$$\times 10\% \text{ contingency} = \$180$$

$$\text{Total} = \underline{\$1,980}$$

## C. Engineering and Preliminary site work

$$\text{Engineering costs:} = \$12,074$$

$$\text{Sub total} = \$12,074$$

$$\times 10\% \text{ contingency} = \$1,207$$

$$\text{Total} = \underline{\$13,082}$$

### **Total Closure Costs**

$$\text{Soil Placement} = \$179,952$$

$$\text{Re-vegetation} = \$58,001$$

$$\text{Grading and Drainage} = \$1,980$$

$$\text{Engineering} = \$13,082$$

$$= \underline{\$253,015}$$

## II. Post-Closure Costs

### A. Final Cover Maintenance and Repair

1. Erosion Repair: Use 1.0 ft of cover over 5% of the landfill area per year (per Utah Division of Solid and Hazardous Waste Guidance)

$$5\% \text{ of landfill} = 0.05 \times 22.5 \text{ ac} = 1.125 = 5,445 \text{ ft}^2 \times 1 \text{ ft} = 5,445 \text{ ft}^3 \\ 5,445 \text{ ft}^3 = 202 \text{ yd}^3$$

$$\text{Soil Placement/ Repair Erosion/Settlement} = 202 \text{ yd}^3 \times \$3.00/\text{yd}^3 = \$606/\text{yr}$$

2. Vegetation Repair: Use 10% of the landfill area per year (per Utah Division of Solid and Hazardous Waste Guidance)

$$10\% \text{ of landfill} = 0.10 \times 980,100 \text{ ft}^2 = 98,010 \text{ ft}^2 = 2.25 \text{ ac} \\ \text{Seeding/Fertilizer/Mulch} = 2.25 \text{ ac} \times \$3,100/\text{ac} = \$6,975$$

### B. Repair of Surface Water Diversion Structures

1. Based on site experience with existing surface water diversionary structure maintenance, minimal work will be required due to the extremely low annual rainfall.

$$\text{Assume 8 hours of backhoe work for every 5 years:} \\ 8\text{hr} \times \$145/\text{hr} = \$1,060 = \$232/\text{yr}$$

### C. Repair of Fences, Gates, and Misc. Maintenance

1. Assume \$300 (\$200 fence gates, \$100 other) every 5 years:  
 $\$300/5\text{yr} = \$60/\text{yr}$

$$\text{Total Maintenance and Repairs} = \$7,873/\text{yr}$$

Post Closure Care Plan = \$1,200  
Semi-Annual Visit/ Inspection = \$1440/yr

**Total Post-Closure Cost**

= \$1,200 + 30 (\$7,873+ 1440)  
= \$1,200 + \$279,390  
Sub Total = \$280,590  
X 10% Contingency = \$28,059

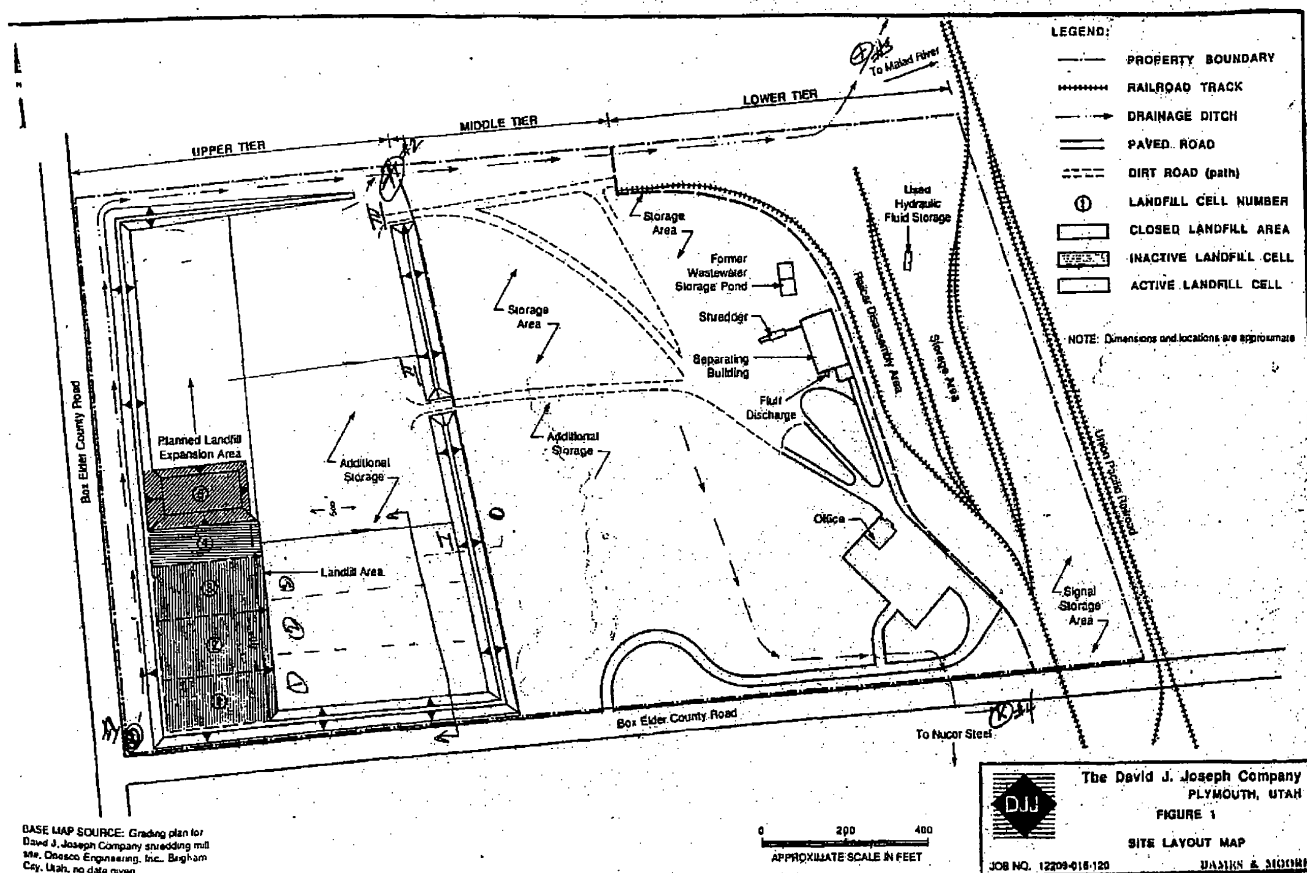
**= \$308,649**

**III. Closure Costs + Post Closure costs**

= \$253,015 + \$308,649

**= \$561,664**

FIGURE 1



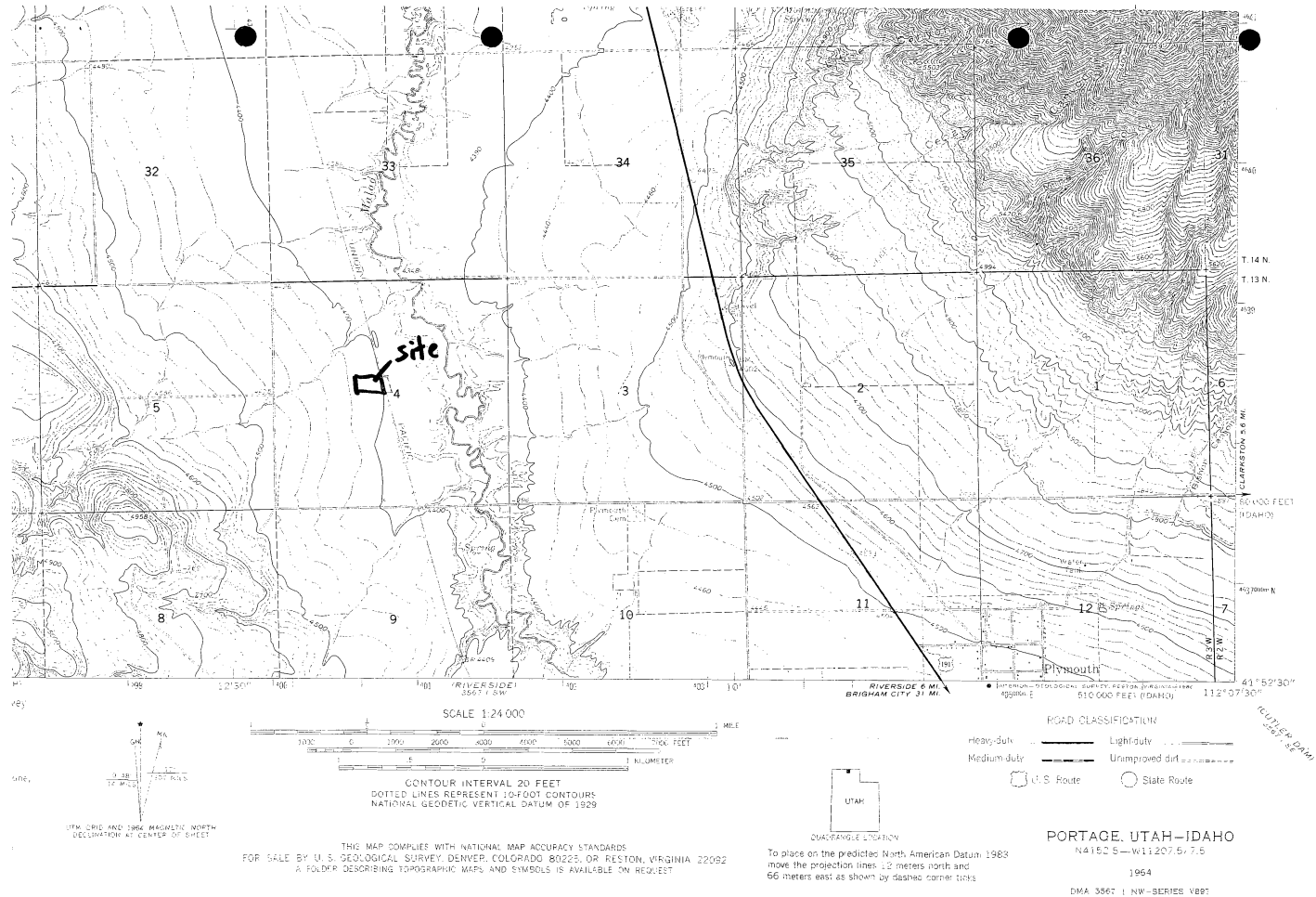
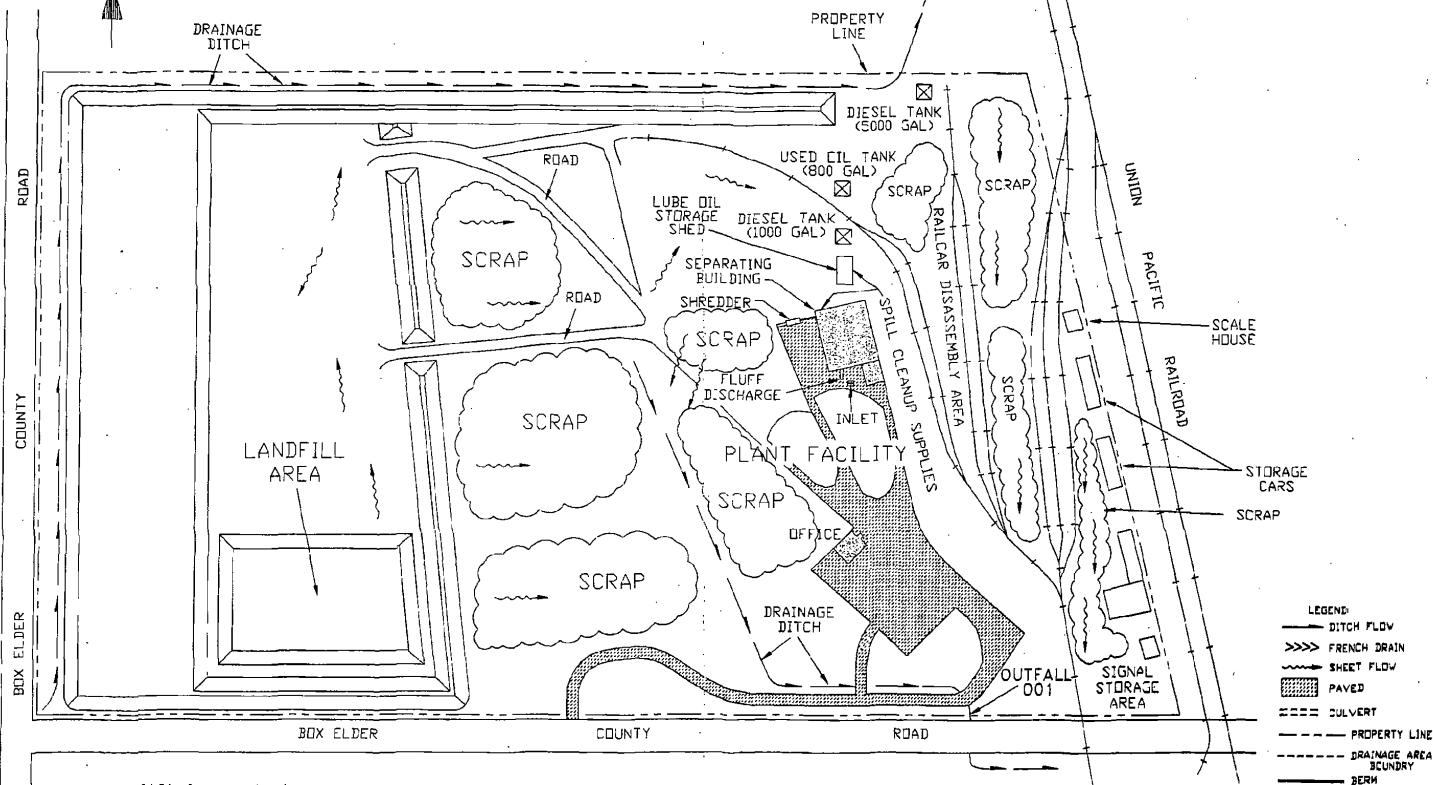


FIGURE 3



— Landfill Limits

FIGURE 4



Figured modified on 09/18/2007

ACAD10 PLOT SCALE .00088888=1"

INTEGRATED ENVIRONMENTAL SERVICES

THE RED COMPANY - CHANDLER, NEW YORK - 516/434-5100

REVISION	DATE	BY	CHK	APP
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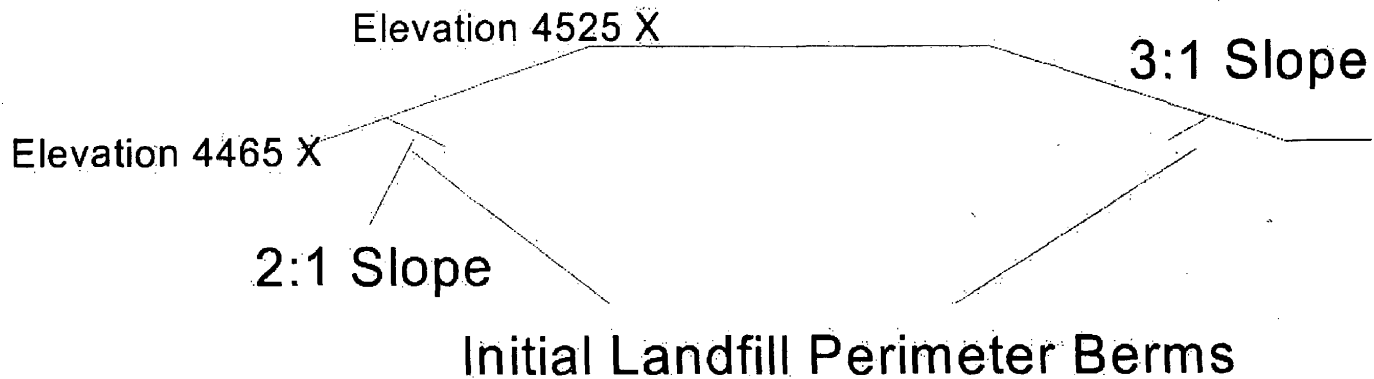
FIGURE C: SITE PLAN

PLYMOUTH, UTAH



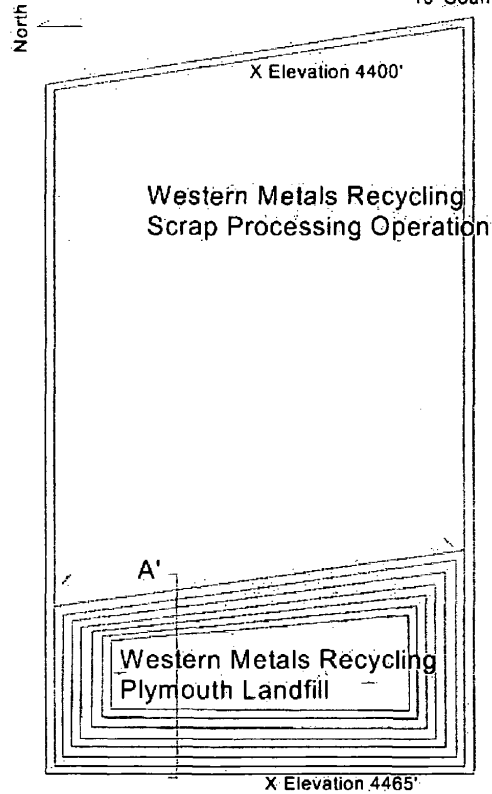
# Conceptual Closure Drawing (Profile) A'

2/15/08



Conceptual Closure Drawing  
2/15/08

- Surface Water Flow
- Property Boundry
- 10' Countour Elevations





Michael Schantz  
Judy Huls

LETTER OF CREDIT NO. CIS407033

PAGE 1

AMENDMENT NUMBER: 002

DATE OF AMENDMENT:  
FEBRUARY 01, 2008

ISSUING BANK:  
FIFTH THIRD BANK, (CINCINNATI OHIO)

APPLICANT:  
WESTERN METALS RECYCLING, LLC  
3676 WEST CALIFORNIA AVENUE  
SUITE A-116  
SALT LAKE CITY, UT 84104

BENEFICIARY:  
UTAH SOLID AND HAZARDOUS WASTE  
CONTROL BOARD  
ATTN: EXECUTIVE SECRETARY  
P.O. BOX 144880  
SALT LAKE CITY, UT 84114-4880

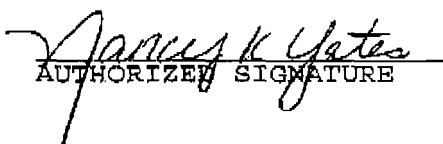
RE: OUR IRREVOCABLE LETTER OF CREDIT NO. CIS407033 ISSUED ON  
NOVEMBER 13, 2007 IN FAVOR OF UTAH SOLID AND HAZARDOUS WASTE FOR  
THE ACCOUNT OF WESTERN METALS RECYCLING, LLC

PLEASE AMEND THE ABOVE AS FOLLOWS:

INCREASE THIS CREDIT BY 186,904.00 U.S. DOLLARS. LETTER OF CREDIT  
AMOUNT AFTER AMENDMENT IS NOW 537,904.00 U.S. DOLLARS.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

REGARDS,

  
AUTHORIZED SIGNATURE

  
AUTHORIZED SIGNATURE